



State of Utah

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DIVISION OF OIL, GAS AND MINING

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March 13, 2000

TO: Internal File

THRU: Daron Haddock, Permit Supervisor *DH*

FROM: Wayne H. Western, Reclamation Specialist III *WHW*

RE: Highwall Elimination, Genwal Resources, Crandall Canyon Mine ACT/015/032

SUMMARY:

This memo documents how the highwall issues for the Crandall Canyon Mine were resolved. The Permittee first address the highwall issues by update their reclamation maps in 1997 by 1999 all highwall issues were resolved. Since the Permittee often submitted changes to the highwall elimination plan in amendment that mostly address other issues the chronology of the highwall elimination effort is difficult to follow.

TECHNICAL ANALYSIS:

Chronology:

In 1996, the Division began an inventory of all Utah coal mines to determine if the highwall issues had been adequately addressed. The Division found the highwall elimination plan for the Crandall Canyon mine was inadequate. The Permittee was notified of the deficiency.

In 1997, the Division received a reclamation plan for the Crandall Canyon mine what addressed the highwall issues. Plate 5-16, Plate 5-17A and Plate 5-17B show the proposed contours and cross section of the reclaimed site. The maps were incorporated into the MRP on July 30, 1997. The text of the MRP was not updated with respect to the highwall issues at that time.

In a letter dated March 5, 1998 the Division notified Genwal Resources Inc. that the text for in MRP for the Crandall Canyon Mine did not adequately address the following highwall issues:

1. Those situations where the permits show parts of the post May 3, 1978, highwalls will be retained contrary to the requirements of Utah's program.
2. Other situations where the permits are not clear what extent pre and post May 3, 1978, highwalls will be eliminated.

In a letter dated April 17, 1998 to the Division the Permittee states that the MRP would be amended and that the highwall issues resolved. The Division reviewed the MRP in January 1999. The cross section on Plate 5-17A and Plate 5-18B and the contours on Plate 5-16 show that the highwalls will be reclaimed. However, the Permittee did not address all the regulations that deal with highwall reclamation and some information in the MRP was incomplete. The defects in the highwall elimination plan were as follows:

1. In Section 5.53 of the MRP Removal or Reduction of Cut Slopes the Permittee refers to the area above the portals as a cut slope instead of a highwall.
2. The requirements that the reclaimed highwall has a safety factor of at least 1.3 are not addressed. (R645-301-553.100)
3. The Permittee did not state in the MRP if any highwall remnants will remain as allowed in previously or continuously mined areas. (R645-301-553.600)

On February 3, 1999, Wayne Western and Gary Gray discussed the highwall elimination plan for the Crandall Canyon Mine. During the meeting both sides agreed that the maps of the approved reclamation plan showed that the highwalls would be eliminated. The fill needed to reclaim the highwalls would come from the fill used to construct the pad expansion.

Both sides also agreed that the text in the MRP needed to be amended with respect to highwall elimination. Gary Gray agreed to amend the MRP with respect to:

1. The Permittee would refer to the area above the portals as highwalls instead of cut slopes. See Section 5.53 of the MRP
2. The Permittee would show that the reclaimed highwall areas had a safety factor of at least 1.3. See R645-301-553.130
3. The Permittee would state that all highwalls would be eliminated. No highwall remnants would be remaining after final reclamation, even highwalls created before May 3, 1978.

On August 18, 1999, the Permittee submitted an amendment for a 50 acre incidental boundary change. The amendment not only contained the request for adding 50 acers to the permit but also included information about the highwall elimination plan. The TA written for the 50 IBC did not specifically address the highwall issues. The TA addressed the request for the 50 acre IBC.

Highwall Issues

In the 50 acre IBC amendment the Permittee addressed the outstanding highwall issues as follows:

1. The Permittee calls all disturbances above the portals as highwalls instead of cut slopes.
2. The Permittee gave the Division slope stability analysis that show that the reclaimed slopes will have a safety factor of at least 1.3
3. The Permittee states that all highwalls will be eliminated. Because the disturbances were pre law, the Permittee could leave some highwall remnants as provided by the regulations.

Findings:

The Permittee met the minimum requirements of this section.

RECOMMENDATIONS:

To clarify the highwalls issued at the Crandall Canyon mine the Permittee and OSM should be notified that the Division has found that there are no outstanding highwall issues at the Crandall Canyon mine.

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